SEQUENCE LISTING

<110> Macina, Roberto
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<120> Compositions and Methods Relating to Lung Specific Genes and Proteins

<130> DEX-0275

<150> 60/252,055
<151> 2000-11-20

<150> 60/252,496
<151> 2000-11-22

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cccttgagaa tttttgggga ggacgacaat tacgtcagag gaataatcct cctcatacac   1680

aaaggctgtt gtggtggtgg tcgtctaccc ccttattcta ctactaataa caagcggtcg   1740

ccgcgggtgg acttcccccc ccaatcataa gcgagttctg cggggagcat acaacacgct   1800

atagcagacg agatcccacc aggtggtgat actatatcaa gtgcgaaatt ctaaaccaac   1860

tttcttttgg aagggaccca gaacatatta gagaacgccc tatttcaacc agagagtgta   1920

ttatagtttg ggcagcagca acatagtgta cacaccagaa acatttaagt acctcacgcc   1980

ccaaaatccg ttgttttagc aacagcgttc ttaactgtgc cccctctttg atcgctgtga   2040

tacaccagac cacaatctct cccacaaaga ccaattttcc ctgacaatca taaacagagg   2100

gcgggctttt tggtggcgca caccaacccc caaacaagac cagaaggacg agccgcgagg   2160

tacagacaga caacgaagac aacgcacaac acaacaacac aaacaccagc gtcgtcggtc   2220

tggggccacg accacaccag gtcggtgcac acaacaaggg acagtcacca ccccggagtg   2280

tgtgagataa caagttgtag tcttccgccg cgctcaacna ccaacagcat gacacgggag   2340

gacaggcacg atagaccacg acacaacaac actgtccgct ggcgcagcta gcaagccgac   2400

accgagccgc ggcacgcagc aagagccagc ggtgcaccca cgccgcggca cgagccaacg   2460

acagcat                                                             2467
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<210> 12
<211> 251
<212> DNA
<213> Homo sapien

<400> 12
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ccactctgaa taactaatac cagagagagc tgcggggtgg ataagaaggc tgctgagtgt   120

ttccacgcct caccgctgct ggctgatgag gaaagagtca gcagatgtgg gttacaatgg   180
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gattcttgca cgtttgtggt gccaatggat tctccacccc accacttcac cctgtaaggc    240

aaagctatga a                                                          251
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<210>  13
<211>  624
<212>  DNA
<213>  Homo sapien

<400>  13
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aaaactttaa tgaactaact gacagcttca tgaaactgtc caccaagatc aagcagagaa    120

aataattaat ttcatgggac taaatgaact aatgaggata atattttcat aattttttat    180

ttgaaatttt gctgattctt taaatgtctt gtttcccaga tttcaggaaa cttttttttc    240

ttttaagcta tccacagctt acagcaattt gataaaatat acttttgtga acaaaaattg    300

agacatttac attttctccc tatgtggtcg ctccagactt gggaaactat tcatgaatat    360

ttatattgta tggtaatata gttattgcac aagttcaata aaaatctgct cttttgtatt    420

aaccggaaaa aaaacacaac aaaaaacaaa aaaaggcgc tgggggtacc ctgggccaaa     480

agctggttcc ctcggtgtgg aaattttgtt tcccggctcc cattccccc aattctccgt      540

gacaaaccac aatgtaaaca caaaacacac aacaccaaac ccaaacacac accagacacc    600

aaaacaacac acacaagcaa acaa                                            624
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<210>  14
<211>  1623
<212>  DNA
<213>  Homo sapien

<220>
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<222>  (856)..(856)
<223>  a, c, g or t

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caaggatgct gtggccttca cctgtgaacc tgaggctcag aacacaacct acctgtggtg    180

ggtaaatggt cagagcctcc cagtcagtcc caggctgcag ctgtccaatg gcaacaggac    240

cctcactcta ttcaatgtca caagaaatga cgcaagagcc tatgtatgtg gaatccagaa    300

ctcagtgagt gcaaaccgca gtgacccagt cacctggatg tcctctatgg ccggacacc     360

cccatcattt cccccccaga ctcgtcttac ctttcgggag cgaacctcaa cctctcctgc    420
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cactcggcct ctaacccatc cccgcagtat tcttggcgta tcaatgggat accgcagcaa      480

cacacacaag ttctctttat cgccaaaatc acgccaaata ataacgggac ctatgcctgt      540

tttgtctcta acttggctac tggccgcaat aattccatag tcaagagcat cacagtctct      600

gcatctagaa cttctcctgg tctctcagct ggggccactg tcggcatcat gattggagtg      660

ctggttgggg ttgctctgat atagcagccc tggtgtagtt tcttcatttc aggaagactg      720

acagttgttt tgcttcttcc ttaaagcatt tgcaacagct acagtctaaa attgcttctt      780

taccaaggat atttacagaa aagactctga ccagagatcg agaccatcct agccaacatc      840

gtgaaaccca tctctnactg tagtcccagt tactcgggag gctgaggcag gagaatcgct      900

tgaacccggg aggtggagat tgcagtgagc ccagatcgca ccactgcact ccagtctggc      960

aacagagcaa gactccatct caaaaagaaa agaaaagaag actctgacct gtactcttga     1020

atacaagttt ctgataccac tgcactgtct gagaatttcc aaaactttaa tgaactaact     1080

gacagcttca tgaaactgtc caccaagatc aagcagagaa ataattaat ttcatgggac      1140

taaatgaact aatgaggata atattttcat aattttttat ttgaaatttt gctgattctt     1200

taaatgtctt gtttcccaga tttcaggaaa cttttttttc ttttaagcta tccacagctt     1260

acagcaattt gataaaatat acttttgtga acaaaaattg agacatttac attttctccc     1320

tatgtggtcg ctccagactt gggaaactat tcatgaatat ttatattgta tggtaatata     1380

gttattgcac aagttcaata aaaatctgct cttttgtata acaaaaaaaa aaaaaaaaaa     1440

aaaaacaaaa aaaaggcgct gggggtaccc tgggccaaaa gctggttccc tcggtgtgga     1500

aattttgttt cccggctccc attcccccca attctccgtg acaaaccaca atgtaaacac     1560

aaaacacaca acaccaaacc caaacacaca ccagacacca aaacaacaca cacaagcaaa     1620

caa                                                                    1623
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<211>    393
<212>    DNA
<213>    Homo sapien

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gatttttttt tttttttttt tttttttttt ttttttttt tttcctgaat                  120

ccctttttttt ccccccgggg ggggggggtg gtggggagca gtaaacatca ggcccaggaa      180

gagttgggtt gcgtcccgtt cttggccatt gtgcctcctc tggaaaataa cacttcaacg      240

atatttcacc tccctcataa ggctggtggg tgtacctcag tggctcatat agtcgtgatt      300
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cccgtggtgt gtaaaagtgg tttactccgg cacccaattc tcccacaaaa cattagcaaa    360

aaactgcatg aacataacac accggtaaca aga                                 393
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<210>  16
<211>  839
<212>  DNA
<213>  Homo sapien

<400>  16
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ttgcaaatag agctgtatac tgttctaaat gtacgacagg tgaactgaac tggcggttat    180

gctcaccatg cgagcacggt aaagggcaga acttcttaac aatgccaata cactgcatat    240

acacaggtgc gtttgttgtg cagttgacga gtaagtacca tgtgacgcga tagatctcta    300

ctatttgacc acggtgtgac gtcccacagc ataggtagga catgtgtggg caagcgttca    360

atgcttgcaa ggaccgcaca tcgtcacatt ggagtggaac actagcaacg ctcatagcta    420

cttataacaa gcgcagtgcg taaactattt caagtgacat acgcatggat aggtctctaa    480

tagatggtcg aacacaactt tgtaaaactc acgtcgaaga tccgcgagct gcccatttta    540

taggggggaa tgccgaatgc tggggccctt gctaattacc caaaacactt tgcttaaaca    600

cttccaagct tttatccatc gttgcacact gccctttagg tgctcggtta catcttccat    660

cttgcggttc ctacttaacg gcccttaggc atatttattc ccccatttgg tttggctttt    720

gaacaacaaa ccttgttggg cttctaagtt tttccccgag gggctttttcc caaaccaaat    780

aattttatcc acctaaccta acctaaaaat cccaataacc cgcgtgaaaa tggcccaat     839
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<210>  17
<211>  1176
<212>  DNA
<213>  Homo sapien

<400>  17
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cttttattac agatttgacc cagcccaaca cgcgcggggc agggtcaaac ctcacaagac    120

atctccgcac caaggggccg gggagacctc aagaagggggc tagaaagggc ttcactctgg    180

agaaatgggg ccccggctct cacaacgccc gggtatacccc ccaatactct caaacaacgt    240

gcgcgtgctc tctttatgtc tccccgcaat tgtggccaca ctcctgtgtc gccccgagtg    300

tgcgtggagt tctctcgtgg tcgcacttaa ttttttctct ctcaccacca cagagggggtg    360
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tgccgtggcg agcgcaacac tgtgggagcc tcagcgtggc ctcacagagc gctgggggcg      420

ataacactcg agtggcgcaa catatagcgc gtgtgtctcc gcgcggtggg gggacacatg      480

tgtgggtata tctcgcgggc tctcacacca aattctcccc cacaaacaaa acatatagcc      540

gggggacaac acaaaaaggg ggcaaaaaag aaagggagga aaacaagcca ccagagagag      600

gagacgagca ccaaataata agatgaaaac ggaataggaa gaacaaaaaa caacactcca      660

caaacaatct aaactaatga tggggcgacg aaaagaagag cgcaccaaag ccacaacgat      720

gacaccgcag agagtatatc cccacaaaca cagacatccg gggagaaaac acaccccacg      780

tatgtattag gagtcagcaa ccacacgacg agagtaaaca tataatcaga agtagagcaa      840

aactaactgg gaggcacaca aatagcagcc gcacgcacga aggtggaaaa agaaagcagc      900

gaggattata ttcaaggacg agtaaaacat aatggggaga gaaccacgca catctcatta      960

cccccgcatg gactatcacc cccatcgggc gcgtcgacag aacatatgaa aacaactcgc      1020

acccatagcg caggccacac cccccggca ggacccagcg acacacgcga ggagctataa      1080

gcgtgagaga cgaaacaaca ccggaagtaa agatacgaag cgatctcacc acaccacaga      1140

aaaaggaggc cgcgaatcgc aaaatacaca acgggt                                1176
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<210>   18
<211>   1069
<212>   DNA
<213>   Homo sapien

<400>   18
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tgccaggtaa ccacgcatcc actccagagt gaacggtggc cagaggttgg acaacggtca      120

catgtgcccg tgtttagtct gcgccacgtt tagaatactt gatggctatc tgagcgtggg      180

actacttcga gtacgtgaat ggagtagagc tcaagactcg tattccagtt actcctgatt      240

cggccagatg gctcgccttg gctatcagat ctcagataag acactgcttc tgacatggca      300

cgacgacaat cacatagata gtcgagaact attctgtcca taaactaaac taagtgagaa      360

actatacaaa aaacaaacaa agaacaaaga caaataacaa cagagctctg aggcgagagt      420

accactgagt gggcgcaaaa atgaacggta gtgtcccccc ggtggtgtgc gacacacact      480

gtgtgtatca ctcccgcgac ctacacacat gaaatctccc ccacacagac acatatatac      540

ccggaaaaat ccacaaacga gttaaaacaa tctcaagact aggccaagtt ccgtcaacca      600

tttgccggat cacggtccca ccatctctct caccacacag gctgacatgc ctacgtcacg      660

agacatctca acgcgcagcg caaacaccta cccacacgtt ctcccggtcc tcacgttgta      720
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atcacgactt ccacgaacaa ctgcgatacc gaaacacagt actcgggccg gatcccgtcg   780

tatgagcccc caaccactcc aacatattgt accactcttg cacacgcaac catcccacat   840

atcaacaaaa actagaagac atattacgat tatctatcct gtccccatac tatacttccc   900

acaaagtcgg cgaagaaata gagacgacgc tcgcattggc tttactatcc cctataaacc   960

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tgcactggga attcactggt acatacaaca acactctatg cgccagtca   1069

<210>   19
<211>   637
<212>   DNA
<213>   Homo sapien

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aacagcgacg ggacagaggc agaatagaca gtaatagagc gacggcctct tatccgacct   120

atcctcagat cacgtgagcc atacagacat gcagcatcag agtcgtagac gagctagcgg   180

cacgagcgag atatacagac tacacatcaa agagacggta gatacggtag ataccacgag   240

aatcacggga gaataacagc acggacaagc aacatgtaga gacgaaagag gccagacaaa   300

aagcgccagg aaccgcgaaa aaggccgacg ttaggtggcg tagaaccata cgacacacg   360

aacaacactg acagaacata cacaaaaatc agagcatcaa gtcaaagtag gcgaaaccac   420

gaaagaccta ctaaaaattg cgagggggtt tcccgcgttg gcgcatcaca tcgtagggat   480

cataatgata ccggacatga cgatatacac ggataacttg tacggcttat acgcttgggg   540

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tggctgtgac aaacaccgga accggaagaa caaacga   637

<210>   20
<211>   895
<212>   DNA
<213>   Homo sapien

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<222>   (365)..(365)
<223>   a, c, g or t

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cagtacccca ccgctagcga cccagcggga tgagtttgcg tgtagctatg ctgagactta   120

acgtggttgg cttcagcgtg ggtcgggctc gcatcttacg atggagtaga tgtccagttc   180

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aagaggccaa ctgactcatt gcatgccaga gggaggtgtg gatacgtcgg cgcgatcaag      240

aatgccgcac tcatgcgacg ctgacgccct tgcttggtcc gtgggtgatc aggcagcagg      300

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cgagtcgaga gtgaagatgc ctgagtcaaa tgggccaaga agtgacagac aaactcgggt      540

tcgggcagtt attcgcagtg cggtcgaagg gggccggcat gtgcaatacg atgctgatca      600

gattgatgcg aataactgga gtaagtgcag tacgacaaag ggcgctctca gagcaagaag      660

acattgccgc ttagtgtaga gtgtagccta ccttgtactt cgacattggt caacggccag      720

aaggacatgt gaaacactag ttgtgggaga cgacctgtgg ggaccggatt cacgtgccaa      780

tgggcttcag taagacgtgg gtatttccca tgggtgcgct gcaacaaata gggtcaagtg      840

cccagactac gaagcaattt cccaccaagc aaatataggg ggaagccaag ggggt          895
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<211>  506
<212>  DNA
<213>  Homo sapien

<220>
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<222>  (276)..(276)
<223>  a, c, g or t


<220>
<221>  misc_feature
<222>  (462)..(462)
<223>  a, c, g or t


<400>  21
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aggcaggagc gcggcccaag cccaggtccc tgctgggccc cagaaagcac ttaaccaggc      120

cccaagcctt caagggaaac caaggcctca accagacaat cttgagggaa ggaaaagcca      180

gactttggcg ttgttttttg ggggaattat tggttttttt ttatgtttct tttggaattt      240

tgtttgttgg ccaaattccc tgtgtgatct tttttncata aaacaacaaa gcaaaagatt      300

ataatccgga aaacaggaaa acaaagaaag aaacaaaaaa caacaaacaa aaggtctggg      360

ggtgacctct gtgggctcat aaggcgtggt tcccgggtgg tggacattgg gtgttcccgg      420

cgtcaacaat tccccaaaca acaaacacgg gcacgacaag tngggggcaca acgcctggag      480
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cccgtgagcg gacaaggaga cggaaa   506

<210> 22
<211> 5387
<212> DNA
<213> Homo sapien

<400> 22
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gcagctggca gccacatgct gagggaggtg ctggatgggc ccgtggtgga cccactcaag   960

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ttccggatgc ggctggccga ggtgcagcgc cagtacaagg agaagcagcg tgagctggtg   1140

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cgcagaggcc ctggcaggcc gcggaaacgg acccacgccc cgagcgccct gtcgccccc   1260

cgcaagagag ggaagagcgg ccacagtagc ggaaagctga gcagcaagtc tctgctgaca   1320

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aagcggtcgc ctgcggggct gctgcggccc aagaaggggc tgggggagcc gggaccctcc   2460

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gaggcggggc ccgaggccag cgacgacgac ctgtggacgc ggcgccgcag cgagcgcatc   2640

ttcctgcacg acgcctcggc tgctgcacct gcgcccgtca gcaccgcgcc cgccaccaag   2700

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cccaggcgcc tcctccgcag cccacacagc ctctgcagcc caaggctcag gccggggcca   3240
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agagccgacc caagaagaga gagggcgtcc acctccccac caccaaggag ctggccaagc   3300

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agctctggaa gtggttcggc aagcccaccc agcggcgtgg catgaagggc aaggcccgca   3420

agctcttcta caaggccatc gtgcgcggca aggagatgat ccgtatcggg gactgtgccg   3480

tgttcctctc tgccggccgc cccaacctgc cctacatcgg ccgcatccag agcatgtggg   3540

agtcgtgggg caacaacatg gtggtccgcg tcaagtggtt ctaccacccc gaggagacca   3600

gcccgggcaa gcagttccac cagggccagc actgggacca gaagtccagc cgcagcctcc   3660

cggcggccct gcgggtctcc agccagagga aggacttcat ggagcgcgcg ctataccagt   3720

cctcgcatgt ggacgaaaat gacgtgcaga cggtgtcgca caagtgcctg gtggtgggcc   3780

tggagcagta tgagcagatg ctgaagacca agaagtacca ggacagcgag ggcctgtact   3840

acctcgcggg cacctacgag cccaccacgg gcatgatctt ctccacggac ggcgtgcccg   3900

tgctctgctg agcccgccgg gccctgcggg ccacctgtgc cccgagggcg gccagggacc   3960

catctccatc actgccatgg cgcggagacc acgtgcgttg tgtgcatgcg agcgctcctg   4020

caggcgtgtg catggggcca ggtgtgcacg tggatgcccg ggtgagtgtg tgtgcatgca   4080

cgtgtgtgca cgcatgtgca catgcctcca gccccacctt ccaacccctc agtgccccca   4140

ggacaggggc ccctcttagc tatcagggta tggccggacc ggcccttcct gcccagcacg   4200

ttgcaagcac ttggccaggc cggccctcca ggctgctgct gcgtgggggc ccgggtgccc   4260

ccaggtccat gcagactggg gattcggtgg ggaggggcgc ttctaaggaa ccaaactgac   4320

gctcactctg ggcttcccaa gcacccttag catggagccc accccaaggc ctcccaccgt   4380

gcatgggaca gggcagcccg atgccagctg gcctacctga ctgtgccagg ggccctgccc   4440

ccaccctctc aggatggcct agacttgggg aacagagccg ggtggggttg cagcccggag   4500

tgtctgtcaa aggcaccagg tggagagggc ccggcacagg cccaccctgg tccaaaccct   4560

cacactacag aaaaccccaa tggtgctgaa actgtcgccc ggccacgcct ggcccctccc   4620

cacccaggag ggaggtggca cttcttaacc tgtacagttt tattgtacca agagactcgc   4680

cccgcccctg tatcataagc ctttaaatgg agtcaacttt ttaattatat atataaagat   4740

aaatatatat aaatatatat ataaactttt taaaactgtg aaaaatagct atgaaattat   4800

aaaaaaaaaa cattctgacg tgcagaatat tattttttat ttcctgttag attatagtgt   4860

ctagcaccgg cttcaccggc ctcccagtcc ccagcacacc ccccgcccac cccgccaagt   4920

gtactgtact cacccccccag gatagagaag tgtttgttag ggagagaaga gggagaggca   4980

ggagccggcc caagcccagg gtccctgctt gggccccaga aagcacttaa ccaggccccca   5040
```

```
agccttcaag ggaaaccaag gcctcaacca gacaatcttg agggaaggaa aagccagact      5100

ttgggtttgt tttttggggg aattattggt tttttttttt atgtttcttt tggaattttg      5160

tttgttggca aattctgtgt gatctttttt cataaaaaaa aagaaaagat ttaattggaa      5220

aaataaaatt gtctggagtg gtttatttca ggggctggag tagggtggt gtctgggggc      5280

attctgccat atcagggcac caagaagcag gattcgactg gaagaagttg ggtgccacgc      5340

gtgcagggc ggtgacccca tgcagccatc taaatgagct catcggc                    5387
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<210>   23
<211>   361
<212>   DNA
<213>   Homo sapien

<400>   23
tcatataggg cgcatggtca tctagatcat gctcgagcgg cgcattgtga tggatggtcg       60

cggccgaggt ccggccgagg tacatttatt taggagtggg tttcgtgggg gtaggtgata      120

aaaattagga tcagttgaag aaaattgaag aaactaggat cagtaagaga aactgtttgc      180

tttacctgaa tttaactatg aaaacacact taacaatctt acacgtttct agatattaag      240

tgaatatgta actcctgtcc atgggtagat gtgtatcttt gacttctgta attatttttg      300

atattctatc agtgtattat gagactctgg cctccctgca gatcttctaa gaaccacact      360

a                                                                       361
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<210>   24
<211>   1682
<212>   DNA
<213>   Homo sapien

<400>   24
gtggcaattc ccccacttac acacaatctt tctgcagttg ctcccagcat taattctgga       60

atggggactg agactatacc aattcagggt tacagagtgg atgagaaaac taagaagtgt      120

tctattccat ttgttaaacc gaacagacat tccccatcag gcatttataa cattaatgtg      180

accacattag tctctagtga aaaaaacctc tttgggcaag taagaaaaga agagaatact      240

ccaggacaga tgtccgtttg cctgaactaa actataatca tctccctgaa ctaagagcac      300

tgggaggcat agctcgaaat tccaggctaa caaagaaaga gagcaaaatt ctttcagaat      360

ctcgaattcc ttctctggct gctattgacc tgcacacccc cagtattaca ttacatcagg      420

tatcaggacc tcccctgtca gatgattcag gggctgattt gcctcaaatg gaacaccagc      480

actgagaacc attttggttc tgaactggat gatgctcttg cacttgagat gacatcttct      540
```

```
tgcagcaaga gtgctgatat cccaagagga gagattcatg gttttgatca tttccttctg      600

aactgcctgc attttctgag gaaggccttc tagaagaagg aaagacaaag acttccaaat      660

gtttcaaagg aagattgaac aaatggccct ccccaactgt tatcccatta cctttcacgt      720

ccaccgatgc tatttcaaga catatccagt ggaataacag tgatatggtt cttgttacat      780

gaatgtgtat ttactgttag gagattgtat attttaagtt accatgatta aaagtgtgta      840

aaaaaggggg acagagagaa atactataaa aggccatgtt actcatgcat tgaactttgt      900

gtgttttctg tataaatgtg tacatttatt taggagtggg tttcgtgggg gtaggtgata      960

aaaattagga tcagttgaag aaaattgaag aaactaggat cagtaagaga aactgtttgc     1020

tttacctgaa tttaactatg aaaacacact taacaatctt acacgtttct agatattaag     1080

tgaatatgta actcctgtcc atgggtagat gtgtatcttt gacttctgta attatttttg     1140

atattctatc agtgtattat gagactctgg cctccctgca gatcttctaa gaaccacact     1200

aatgcaagct tgacagagaa acctctttcg aatgacttac tacaactctg gcattggtta     1260

gttccatgta ttgtaagatt ctggtgctaa tgctccatac agaattgatc aggactgatt     1320

actcttctgt ggaccaattg ctattgaact acccagctga agagggtttg gggagagaac     1380

gttcattatt atggactcca cttttgtccc ctggtagttt aagggtgata ctagaatcca     1440

gagaagttcc tgtctccttg tggcctcaaa cactcaggcc gtctcaaaag cttttcacca     1500

aggtgcaaaa tcatttacct gcattccaca catcttttcc aatgcatgga tccaaaactt     1560

tttaggtggg aggaataaac taagttggct acaggttctt gatttctggg tttctacaca     1620

tgctctgcat ttatcatttt agagaatggt tgtttaggga accagaattt gtgagttttt     1680

tt                                                                    1682
```

```
<210>  25
<211>  718
<212>  DNA
<213>  Homo sapien

<400>  25
cggccgaggt accagagaac atacagtaaa taatgatttt tacatattga agttgcagtt       60

gttgactgtg atgttgaaga tgtcttcaga cagtagttca tactgcattc cacacttgag      120

gctcaagtga ttggagtgat ttctgcaatt actagtttgt tctataacta agactgtttg      180

ttggtctctg catatacttt caggtcatta aatgctacag aaatgagaaa tgaaatacaa      240

actttttaac tcctactcag atgtccaaac agcttcttag ttcctgtcag atcagtaata      300

atactgggtt tggtctttct taaaccaagc ataatcctgc ttatcttaga atgaaacagt      360
```

```
attcctattc agaggtaaat agagttaacc tttactcgtg taattttat tgttgtttta      420

ccatttcatg gtgttcatac tagcccccctt tcctttccct ctaagtgact gctgaggttc     480

tcaccatttc agaataaaat tcttgtcctt tgaggttgga aatttaatga taatgaaaaa     540

ctgtatgtgt cagtatactt aaaaggaaag gttatatcat tctcctcatt tggatgtaaa     600

atttacctgt tagagaacac attggaatta tagaacagaa acacacccc aaacacacgg      660

ctgggcgtaa ccagggccaa agcggcccgg ggtgaatggt atccgcccca aatccatc      718
```

<210> 26
<211> 708
<212> DNA
<213> Homo sapien

<400> 26

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ggatacacag aatgatcata tatgggccat gttatctaga tgcatgctcg agccggcgct      60

aatgtgatgg atggtcgcgg cgaggtacca gacatgctca aaatgtgctt tcccgttatc     120

tttcagaacc caccaccagg aaaccaaaac ggaccccact ctgagagttc catgatgaag     180

gtgtttaatg aaatcacatt aacccctaag taaaggcagt agatgaaatt atccattatc     240

ttttgtctct ttttttttca tagtgtgaga ctacgattgg caaagtggga aaacggacac     300

ccaactcatt tgattagcag aataaatggt gtccattaaa tccctcctct ttgaaagtta     360

tgtgcatggc ccagcagtgg tacgctttag tgccctgcaa ctcccagaca ctttcgggag     420

gccgatggca gaaaggactc gcttgagccc aggagtccga gcaccagcct gggcaactta     480

cgtagggacc ccatctcgtg gttttcttct tttgtacgaa aagaagcaga tttctgtggc     540

gaagacgcta ttgcagacca caagggaggc tcataggaac actgtctcat attgattact     600

ctatgagaag aaactcccgt gtatggaaag ggggcactga gagatctggg cgctcgagag     660

aaacagtggg ggacgcacag ggccggataa gatccaagcc cctattat                 708
```

<210> 27
<211> 1026
<212> DNA
<213> Homo sapien

<400> 27
```
ggtcaaagcg ggaaaccaaa gagtatgtgg tatccatatt cgttgcaaaa atgataatta      60

ctggaatttt ccaaacatca aasgaagggg gatcaatggt taccactatc gttttcagcc     120

aatatacaga tgttcgctca aggtctaggt tttatttcta catagtagta ttcacatgag     180

ttccctattc tgaagtatta tcaaaacgag gacccttgaa ggtcgagccc agcttgtctt     240

gacttcaaag atgacacagc agccaaccta gaatcctggc ttgctgcttg agtcctagaa     300
```

```
atcatgtctt ctcatgtttt acaacaagct gtgtctctga aaactaaaat cagacttcag    360

attcctctga aacagttctg gttcccaagc atccgcacca tggtacccag acatgctcaa    420

aatgtgcttt cccttatctt tcaaaaccca ccaccaggaa accaaaacgg accccactct    480

gagagttcca tgatgaaggt gtttaatgaa atcacattaa cccctaagta aaggcagtag    540

atgaaattat ccattatctt ttgtctcttt tttttcata gtgtgagact acgattggca    600

aagtgggaaa acggcaccc aactcatttg attagcagaa taaatggtgt ccattaaatc    660

cctcctcttt gaaagttatg tgcatggccc agcagtggta cgctttagtg ccctgcaact    720

cccagacact ttcgggaggc cgatggcaga aaggactcgc ttgagcccag gagtccgagc    780

accagcctgg gcaacttacg tagggacccc atctcgtggt tttcttcttt tgtacgaaaa    840

gaagcagatt tctgtggcga agacgctatt gcagaccaca agggaggctc ataggaacac    900

tgtctcatat tgattactct atgagaagaa actcccgtgt atggaaaggg ggcactgaga    960

gatctgggcg ctcgagagaa acagtggggg acgcacaggg ccggataaga tccaagcccc   1020

tattat                                                              1026


<210>  28
<211>  406
<212>  DNA
<213>  Homo sapien

<400>  28
gaagatgact catatagggc gatggttcaa catagatgca tgctcgagcg gcgcgttgtg     60

atggatgcgt ggtcgcggcc gaggtactcc acttcaaatt tcccaagaaa tcagaagaat    120

ggtgaacaag tgctggtttc acaatactca gcaagtgttt acacattggg ccaaggacag    180

atttttcctg gagaaggatt ttaccactgc caccatcttg aaattcttca tcgtttggaa    240

cacagagcca tagattttca tttctgcact cagctctgtt ctgagaccgg ggccataggg    300

gttcttggag agacagggca gatggaagaa gtggaaggca tctgcacact gtagagtgcc    360

tttaagccac ccccattgcc tgagttgttt tccttttta caaatg                    406


<210>  29
<211>  818
<212>  DNA
<213>  Homo sapien

<400>  29
gcttttcgtt gttgagcgtc acttaaattc gtgtcatttc atgttggtac aggtactcca     60

cttcaaattt cccaagaaat tcagaagaat tgtgaacaag ttgctggttt cacaatactc    120
```

```
agcaagtgtt tacacattgg gccaaggaca gatttttcct ggagaaggat tttaccactg      180

ccaccatctt gaaattcttc atcgttttgg aacacagagc catagatttt catttctgca      240

ctcagctctg ttctgagacc ggggccatag gggttcttgg agagacaggg cagatggaag      300

aagtggaagg catctgcaca ctgtagagtg cctttaagcc accccattg cctgagttgt       360

tttccttttt tacaaatgaa gcttgttctt ttctgggtct ctccaaggtg gagtgtagga      420

gggcagtgtt ttccgtagcc tctggctcgt gccgcgctct cagactcttc agttctcctc      480

acccacacga gcccaatgag gtaggccttt ttattccatc ttgcagacaa agaaacgatt      540

actcagggtt gataaacacc acccaagatc tcatgggagg aaggaacaga gatgaaaata      600

aaatgcaagg ctgtgtaagt ccaacaaata tgccacatcc atgtcacctc tggggtctga      660

tccagcctct caacaaccac cgtcacccct caacaggcag gtgacagtgg cgagacggcc      720

cagcccagca acaggctccc ccattgcagt gccattgcta tgccagagga cacaaacccc      780

agaccttgac tcctcctcac agaccctgaa cagctaga                             818
```

```
<210>   30
<211>   57
<212>   PRT
<213>   Homo sapien

<400>   30
```

```
Met Leu Trp Pro Arg Leu Ser Leu Ser Arg Thr Pro Pro Val His Leu
1               5                   10                  15


Ser Arg Cys Asp Thr Arg Arg Arg Leu Ser Glu Pro Leu Pro Lys
                20                  25                  30


Ser Val Arg Gly Glu Ile His Arg Ala Cys Glu Arg His Thr Lys Cys
            35                  40                  45


Pro Val Ala Leu Ile His Tyr Ile Ile
    50                  55
```

```
<210>   31
<211>   80
<212>   PRT
<213>   Homo sapien

<400>   31
```

```
Met Ser Tyr Lys Asn Gln His Thr Lys Gln Thr Glu Gln Phe Arg Ser
1               5                   10                  15
```

Leu Cys Tyr Ser Leu Pro Asp Leu Arg Ser Tyr Cys Leu Ala Tyr Pro
            20   25   30

Pro Ser Thr Tyr Leu Cys Tyr Phe Leu Ser Asn Ile Gln His Ile Pro
            35   40   45

His Thr Asn Ile Thr Asn Arg Ser Thr Ser Gln Gln Arg Val Ile Tyr
            50   55   60

His Ser Ser Leu Thr Ala Leu Val Thr Ile Leu Asn His Pro Gln Thr
65   70   75   80

<210>   32
<211>   41
<212>   PRT
<213>   Homo sapien

<400>   32

Met Cys Val Thr Arg Ser Leu Leu Asn Cys Leu Tyr Arg Ile Pro Trp
1   5   10   15

Leu Glu Ser His Asp Cys Ser Phe Gly Ser Ala Pro Glu His Cys Thr
            20   25   30

Glu Thr Ala Cys Val Gln Gly Val Gly
            35   40

<210>   33
<211>   135
<212>   PRT
<213>   Homo sapien

<400>   33

Met Met Ser Ser Ser Ala Ser Pro Leu Ser Leu Pro Leu Ser Leu Trp
1   5   10   15

Arg Phe Ser Thr Leu Pro Ala Leu Pro Arg Ala Gln Phe Pro Pro Asp
            20   25   30

Pro Thr Lys Val Lys Gly Glu Glu Glu Lys Arg Gly Arg Gly Ser Asp
            35   40   45

Ala Thr Ser Val Leu His Leu Val Ala Glu Arg Glu Gly Pro Thr Arg
        50   55   60

Asp Arg Gly Ser Leu Cys Val Cys Val Cys Val Cys Val Cys Val Cys

65   70   75   80

Val Cys Val Cys Val Leu Arg Trp Ser Leu Ala Leu Ser Pro Arg Leu
                    85   90   95

Glu Gly Ser Gly Ala Ile Leu Ala His Cys Asn Leu Arg Leu Pro Gly
                100   105   110

Ser Ser Asp Ser Pro Ala Ser Ala Ser Gln Val Thr Gly Ile Thr Gly
            115   120   125

Val Pro Arg Pro Arg Pro Arg
    130   135

<210>   34
<211>   90
<212>   PRT
<213>   Homo sapien

<400>   34

Leu Arg Trp Ser Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Ala
1   5   10   15

Ile Leu Ala His Cys Asn Leu Cys Leu Pro Ser Ser Ser Asp Ser Pro
                20   25   30

Ala Ser Ala Ser Gln Val Ala Gly Ile Thr Gly Ala His His Val
            35   40   45

Gln Leu Ile Phe Val Phe Leu Val Glu Thr Gly Phe Arg His Val Gly
    50   55   60

Ala Ala Ala Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala
65   70   75   80

Ser Gln Ser Ala Gly Ile Thr Gly Val Thr
                85   90

<210>   35
<211>   218
<212>   PRT
<213>   Homo sapien

<400>   35

Met Gly Val Pro Ile Leu Leu Asp Ala Arg Ser Ser Pro Thr Pro Thr
1   5   10   15

```
Pro Ala Ala Ser Pro Arg Val Pro Val Val Tyr Asp Ser Leu Arg Pro
            20              25              30

Pro Arg Arg Pro Gly Pro Gln His Leu Pro Tyr Phe Val Pro Pro Pro
            35              40              45

Asn Phe Trp Gly Ala Pro Tyr Leu Leu Pro Ala Arg Pro Trp Pro Leu
    50              55              60

Phe Thr Ala Phe Gly Arg Ser Pro Ser Val Cys Pro Cys Ser Arg Ser
65              70              75              80

His Gly Cys Phe Ser Ser Pro Ala Pro Pro Thr Thr His Leu Phe
            85              90              95

Cys Pro Val Ser Cys Pro Gln Ala Pro Ser Gly Thr Pro Phe Arg Arg
            100             105             110

Glu Thr Leu Gly Asp Glu Cys Pro Pro Ala Thr Ser Met Pro Pro Ala
        115             120             125

Pro Cys Pro Ile Pro Glu Ile Phe Arg Gln Tyr Leu Lys Trp Val Pro
    130             135             140

Leu Met Asn Arg Gly Ile Pro Trp Gly Asn Pro Thr Arg Gly Ile Trp
145             150             155             160

Ala Pro Phe Gln Cys Gly Glu Lys Lys Lys Phe Trp Leu Cys Pro Pro
            165             170             175

Leu Asn His Lys Lys Lys Lys Lys Lys Lys Lys Ser Thr Ala Ala
            180             185             190

Ala Thr Thr Ile His His Thr Ala Pro Leu Glu His Ala Ser Arg Met
        195             200             205

Asn His Gly Pro Ile Cys Leu Ser Phe Ser
    210             215
```

<210> 36
<211> 61
<212> PRT
<213> Homo sapien

<400> 36

Met Thr Gly Ile Thr Leu Asn Ile Cys Arg His Leu Cys Asn Leu Ser
1   5   10   15

Arg Val Asn Leu Thr Phe Arg Asn Cys Val Phe His Ser Arg Met Val
            20   25   30

Met Ile Leu Gly Cys Asp Ile Trp Asp Leu Pro Thr Met Gly Thr Leu
        35   40   45

Asp Lys Met Asn Thr Asp Glu Pro Thr Asp Leu Cys Tyr
    50   55   60

<210> 37
<211> 56
<212> PRT
<213> Homo sapien

<400> 37

Met Ala His Cys Ser Leu Asn Leu Leu Gly Ser Ser Asn Pro Ser Val
1   5   10   15

Ser Val Pro Gln Val Thr Arg Thr Thr Gly Met Cys His His Trp Leu
            20   25   30

Phe Phe Cys Leu Phe Phe Glu Thr Thr Ser Tyr Tyr Val Ala Gln Ala
        35   40   45

His Leu Glu Ala Pro Gly Leu Lys
    50   55

<210> 38
<211> 96
<212> PRT
<213> Homo sapien

<400> 38

Phe Phe Phe Phe Phe Ala Gly Lys Val Ser Leu Ser Pro Lys Leu Glu
1   5   10   15

Cys Ser Gly Thr Val Met Ala His Cys Ser Leu Asn Leu Leu Gly Ser
            20   25   30

Ser Asn Pro Ser Val Ser Val Pro Gln Val Thr Arg Thr Thr Gly Met
        35   40   45

Cys His His Trp Leu Phe Phe Cys Leu Phe Phe Glu Thr Thr Ser Tyr
    50   55   60

Tyr Val Ala Gln Ala His Leu Lys Leu Leu Gly Ser Ser Asp Pro Pro
65   70   75   80

Ser Ala Ser Ala Ser Gln Asn Ala Cys Asp Tyr Arg Gly Val Ser His
                85   90   95

<210> 39
<211> 76
<212> PRT
<213> Homo sapien

<400> 39

Met Leu Pro Pro Leu Cys Phe Tyr Gln Leu Ser Arg Val Phe Ala Ser
1   5   10   15

Trp Leu Ile Lys Val Leu Val Gly Gly Gly Asn Val Cys Glu Ser Pro
                20   25   30

Gly Asp Asp Asn Pro Thr Trp Phe Asn Ser Pro Thr Gly Gly Ser Pro
            35   40   45

Pro Lys Trp Pro His Arg Gly Asn Pro Gln Ala Leu Leu Ala Leu Tyr
    50   55   60

Cys Cys Val Val Phe Val Val Lys Phe Leu Val Tyr
65   70   75

<210> 40
<211> 146
<212> PRT
<213> Homo sapien

<400> 40

Ala Leu Ile Val Leu Gly Leu Val Leu Leu Ser Val Thr Val Gln Gly
1   5   10   15

Lys Val Phe Glu Arg Cys Glu Leu Ala Arg Thr Leu Lys Arg Leu Gly
                20   25   30

Met Asp Gly Tyr Arg Gly Ile Ser Leu Ala Asn Trp Met Cys Leu Ala
            35   40   45

```
Lys Trp Glu Ser Gly Tyr Asn Thr Arg Ala Thr Asn Tyr Asn Ala Gly
    50              55              60


Asp Arg Ser Thr Asp Tyr Gly Ile Phe Gln Ile Asn Ser Arg Tyr Trp
65              70              75              80


Cys Asn Asp Gly Lys Thr Pro Gly Ala Val Asn Ala Cys His Leu Ser
                85              90              95


Cys Ser Ala Leu Leu Gln Asp Asn Ile Ala Asp Ala Val Ala Cys Ala
            100             105             110


Lys Arg Val Val Arg Asp Pro Gln Gly Ile Arg Ala Trp Val Ala Trp
        115             120             125


Arg Asn Arg Cys Gln Asn Arg Asp Val Arg Gln Tyr Val Gln Gly Cys
    130             135             140


Gly Val
145
```

```
<210>  41
<211>  34
<212>  PRT
<213>  Homo sapien

<400>  41
```

```
Met Arg Lys Glu Ser Ala Asp Val Gly Tyr Asn Gly Ile Leu Ala Arg
1               5               10              15


Leu Trp Cys Gln Trp Ile Leu His Pro Thr Thr Ser Pro Cys Lys Ala
            20              25              30


Lys Leu
```

```
<210>  42
<211>  80
<212>  PRT
<213>  Homo sapien

<400>  42
```

```
Met Phe Ala Cys Val Cys Cys Phe Gly Val Trp Cys Val Phe Gly Phe
1               5               10              15


Gly Val Val Cys Phe Val Phe Thr Leu Trp Phe Val Thr Glu Asn Trp
```

```
                    20                        25                        30

    Gly Glu Trp Glu Pro Gly Asn Lys Ile Ser Thr Pro Arg Glu Pro Ala
             35                  40                  45


    Phe Gly Pro Gly Tyr Pro Gln Arg Leu Phe Phe Val Phe Cys Cys Val
        50                  55                  60


    Phe Phe Pro Val Asn Thr Lys Glu Gln Ile Phe Ile Glu Leu Val Gln
    65                  70                  75                  80
```

<210> 43
<211> 227
<212> PRT
<213> Homo sapien

<400> 43

```
    Thr Ser Gln Ala Asn Asn Ser Ala Ser Gly His Ser Arg Thr Thr Val
    1               5                   10                  15


    Lys Thr Ile Thr Val Ser Ala Asp Val Pro Lys Pro Ser Ile Ser Ser
                 20                  25                  30


    Asn Asn Ser Lys Pro Val Glu Asp Lys Asp Ala Val Ala Phe Thr Cys
             35                  40                  45


    Glu Pro Glu Ala Gln Asn Thr Thr Tyr Leu Trp Trp Val Asn Gly Gln
        50                  55                  60


    Ser Leu Pro Val Ser Pro Arg Leu Gln Leu Ser Asn Gly Asn Arg Thr
    65                  70                  75                  80


    Leu Thr Leu Phe Asn Val Thr Arg Asn Asp Ala Arg Ala Tyr Val Cys
                 85                  90                  95


    Gly Ile Gln Asn Ser Val Ser Ala Asn Arg Ser Asp Pro Val Thr Leu
                 100                 105                 110


    Asp Val Leu Tyr Gly Pro Asp Thr Pro Ile Ile Ser Pro Pro Asp Ser
             115                 120                 125


    Ser Tyr Leu Ser Gly Ala Asn Leu Asn Leu Ser Cys His Ser Ala Ser
        130                 135                 140


    Asn Pro Ser Pro Gln Tyr Ser Trp Arg Ile Asn Gly Ile Pro Gln Gln
```

145   150   155   160

His Thr Gln Val Leu Phe Ile Ala Lys Ile Thr Pro Asn Asn Asn Gly
                165   170   175

Thr Tyr Ala Cys Phe Val Ser Asn Leu Ala Thr Gly Arg Asn Asn Ser
                180   185   190

Ile Val Lys Ser Ile Thr Val Ser Ala Ser Arg Thr Ser Pro Gly Leu
                195   200   205

Ser Ala Gly Ala Thr Val Gly Ile Met Ile Gly Val Leu Val Gly Val
                210   215   220

Ala Leu Ile
225

<210> 44
<211> 119
<212> PRT
<213> Homo sapien

<400> 44

Met Leu Glu Arg Arg Ser Val Met Asp Phe Phe Phe Phe Phe Phe Phe
1   5   10   15

Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Leu Asn Pro Phe Phe Ser
                20   25   30

Pro Pro Gly Gly Gly Val Val Gly Ser Ser Lys His Gln Ala Gln Glu
                35   40   45

Glu Leu Gly Cys Val Pro Phe Leu Ala Ile Val Pro Pro Leu Glu Asn
        50   55   60

Asn Thr Ser Thr Ile Phe His Leu Pro His Lys Ala Gly Gly Cys Thr
65   70   75   80

Ser Val Ala His Ile Val Val Ile Pro Val Val Cys Lys Ser Gly Leu
                85   90   95

Leu Arg His Pro Ile Leu Pro Gln Asn Ile Ser Lys Lys Leu His Glu
                100   105   110

His Asn Thr Pro Val Thr Arg

115

<210> 45
<211> 105
<212> PRT
<213> Homo sapien

<400> 45

```
Met Ser Val Ala Ser Val Pro Leu Gln Cys Asp Asp Val Arg Ser Leu
1               5               10              15

Gln Ala Leu Asn Ala Cys Pro His Met Ser Tyr Leu Cys Cys Gly Thr
            20              25              30

Ser His Arg Gly Gln Ile Val Glu Ile Tyr Arg Val Thr Trp Tyr Leu
            35              40              45

Leu Val Asn Cys Thr Thr Asn Ala Pro Val Tyr Met Gln Cys Ile Gly
        50              55              60

Ile Val Lys Lys Phe Cys Pro Leu Pro Cys Ser His Gly Glu His Asn
65              70              75              80

Arg Gln Phe Ser Ser Pro Val Val His Leu Glu Gln Tyr Thr Ala Leu
            85              90              95

Phe Ala Ile Asn Ile Tyr Arg Asn Ile
            100             105
```

<210> 46
<211> 79
<212> PRT
<213> Homo sapien

<400> 46

```
Met Gly Pro Arg Leu Ser Gln Arg Pro Gly Ile Pro Pro Ile Leu Ser
1               5               10              15

Asn Asn Val Arg Val Leu Ser Leu Cys Leu Pro Ala Ile Val Ala Thr
            20              25              30

Leu Leu Cys Arg Pro Glu Cys Ala Trp Ser Ser Leu Val Val Ala Leu
            35              40              45

Asn Phe Phe Ser Leu Thr Thr Thr Glu Gly Cys Ala Val Ala Ser Ala
        50              55              60
```

Thr Leu Trp Glu Pro Gln Arg Gly Leu Thr Glu Arg Trp Gly Arg
65   70   75

<210>   47
<211>   74
<212>   PRT
<213>   Homo sapien

<400>   47

Met Cys Leu Cys Gly Gly Asp Phe Met Cys Val Gly Arg Gly Ser Asp
1   5   10   15

Thr His Ser Val Cys Arg Thr Pro Pro Gly Gly His Tyr Arg Ser Phe
             20   25   30

Leu Arg Pro Leu Ser Gly Thr Leu Ala Ser Glu Leu Cys Cys Tyr Leu
        35   40   45

Ser Leu Phe Phe Val Cys Phe Leu Tyr Ser Phe Ser Leu Ser Leu Val
        50   55   60

Tyr Gly Gln Asn Ser Ser Arg Leu Ser Met
65   70

<210>   48
<211>   59
<212>   PRT
<213>   Homo sapien

<400>   48

Met Phe Cys Gln Cys Cys Ser Cys Val Val Met Val Leu Arg His Leu
1   5   10   15

Thr Ser Ala Phe Phe Ala Val Pro Gly Ala Phe Cys Leu Ala Ser Phe
             20   25   30

Val Ser Thr Cys Cys Leu Ser Val Leu Leu Phe Ser Arg Asp Ser Arg
        35   40   45

Gly Ile Tyr Arg Ile Tyr Arg Leu Phe Asp Val
        50   55

<210>   49
<211>   60
<212>   PRT

<213> Homo sapien

<400> 49

```
Met Pro Glu Ser Asn Gly Pro Arg Ser Asp Arg Gln Thr Arg Val Arg
1               5                   10                  15

Ala Val Ile Arg Ser Ala Val Glu Gly Gly Arg His Val Gln Tyr Asp
            20                  25                  30

Ala Asp Gln Ile Asp Ala Asn Asn Trp Ser Lys Cys Ser Thr Thr Lys
            35                  40                  45

Gly Ala Leu Arg Ala Arg Arg His Cys Arg Leu Val
        50                  55                  60
```

<210> 50
<211> 1134
<212> PRT
<213> Homo sapien

<400> 50

```
Arg Leu Ala Leu Ser Pro Glu Asp Lys Pro Ile Arg Leu Ser Pro Ser
1               5                   10                  15

Lys Ile Thr Glu Pro Leu Arg Glu Gly Pro Glu Glu Glu Pro Leu Ala
            20                  25                  30

Glu Arg Glu Val Lys Ala Glu Val Glu Asp Met Asp Glu Gly Pro Thr
            35                  40                  45

Glu Leu Pro Pro Leu Glu Ser Pro Leu Pro Leu Pro Ala Ala Glu Ala
        50                  55                  60

Met Ala Thr Pro Ser Pro Ala Gly Gly Cys Gly Gly Gly Leu Leu Glu
65                  70                  75                  80

Ala Gln Ala Leu Ser Ala Thr Gly Gln Ser Cys Ala Glu Pro Ser Glu
                85                  90                  95

Cys Pro Asp Phe Val Glu Gly Pro Glu Pro Arg Val Asp Ser Pro Gly
            100                 105                 110

Arg Thr Glu Pro Cys Thr Ala Ala Leu Asp Leu Gly Val Gln Leu Thr
            115                 120                 125
```

Pro Glu Thr Leu Val Glu Ala Lys Glu Glu Pro Val Glu Val Pro Val
    130   135   140

Gly Val Pro Val Val Glu Ala Val Pro Glu Glu Gly Leu Ala Gln Val
145   150   155   160

Ala Pro Ser Glu Ser Gln Pro Thr Leu Glu Met Ser Asp Cys Asp Val
            165   170   175

Pro Ala Gly Glu Gly Gln Cys Pro Ser Leu Glu Pro Gln Glu Ala Val
            180   185   190

Pro Val Leu Gly Ser Thr Cys Phe Leu Glu Glu Ala Ser Ser Asp Gln
            195   200   205

Phe Leu Pro Ser Leu Glu Asp Pro Leu Ala Gly Met Asn Ala Leu Ala
    210   215   220

Ala Ala Ala Glu Leu Pro Gln Ala Arg Pro Leu Pro Ser Pro Gly Ala
225   230   235   240

Ala Gly Ala Gln Ala Leu Glu Lys Leu Glu Ala Ala Glu Ser Leu Val
            245   250   255

Leu Glu Gln Ser Phe Leu His Gly Ile Thr Leu Leu Ser Glu Ile Ala
            260   265   270

Glu Leu Glu Leu Glu Arg Arg Ser Gln Glu Met Gly Gly Ala Glu Arg
            275   280   285

Ala Leu Val Ala Arg Pro Ser Leu Glu Ser Leu Leu Ala Ala Gly Ser
    290   295   300

His Met Leu Arg Glu Val Leu Asp Gly Pro Val Val Asp Pro Leu Lys
305   310   315   320

Asn Leu Arg Leu Pro Arg Glu Leu Lys Pro Asn Lys Lys Tyr Ser Trp
            325   330   335

Met Arg Lys Lys Glu Glu Arg Met Tyr Ala Met Lys Ser Ser Leu Glu
            340   345   350

Asp Met Asp Ala Leu Glu Leu Asp Phe Arg Met Arg Leu Ala Glu Val
            355   360   365

Gln Arg Gln Tyr Lys Glu Lys Gln Arg Glu Leu Val Lys Leu Gln Arg
    370   375   380

Arg Arg Asp Ser Glu Asp Arg Arg Glu Glu Pro His Arg Ser Leu Ala
385   390   395   400

Arg Arg Gly Pro Gly Arg Pro Arg Lys Arg Thr His Ala Pro Ser Ala
            405   410   415

Leu Ser Pro Pro Arg Lys Arg Gly Lys Ser Gly His Ser Ser Gly Lys
            420   425   430

Leu Ser Ser Lys Ser Leu Leu Thr Ser Asp Asp Tyr Glu Leu Gly Ala
        435   440   445

Gly Ile Arg Lys Arg His Lys Gly Ser Glu Glu Glu His Asp Ala Leu
    450   455   460

Ile Gly Met Gly Lys Ala Arg Gly Arg Asn Gln Thr Trp Asp Glu His
465   470   475   480

Glu Ala Ser Ser Asp Phe Ile Ser Gln Leu Lys Ile Lys Lys Lys Lys
            485   490   495

Met Ala Ser Asp Gln Glu Gln Leu Ala Ser Lys Leu Asp Lys Ala Leu
            500   505   510

Ser Leu Thr Lys Gln Asp Lys Leu Lys Ser Pro Phe Lys Phe Ser Asp
        515   520   525

Ser Ala Gly Gly Lys Ser Lys Thr Ser Gly Gly Cys Gly Arg Tyr Leu
        530   535   540

Thr Pro Tyr Asp Ser Leu Leu Gly Lys Asn Arg Lys Ala Leu Ala Lys
545   550   555   560

Gly Leu Gly Leu Ser Leu Lys Ser Ser Arg Glu Gly Lys His Lys Arg
            565   570   575

Ala Ala Lys Thr Arg Lys Met Glu Val Gly Phe Lys Ala Arg Gly Gln
            580   585   590

Pro Lys Ser Ala His Ser Pro Phe Ala Ser Glu Val Ser Ser Tyr Ser
        595   600   605

Tyr Asn Thr Asp Ser Glu Glu Asp Glu Glu Phe Leu Lys Asp Glu Trp
    610   615   620

Pro Ala Gln Gly Pro Ser Ser Ser Lys Leu Thr Pro Ser Leu Leu Cys
625   630   635   640

Ser Met Val Ala Lys Asn Ser Lys Ala Ala Gly Gly Pro Lys Leu Thr
            645   650   655

Lys Arg Gly Leu Ala Ala Pro Arg Thr Leu Lys Pro Lys Pro Ala Thr
            660   665   670

Ser Arg Lys Gln Pro Phe Cys Leu Leu Leu Arg Glu Ala Glu Ala Arg
      675   680   685

Ser Ser Phe Ser Asp Ser Ser Glu Glu Ser Phe Asp Gln Asp Glu Ser
      690   695   700

Ser Glu Glu Glu Asp Glu Glu Glu Leu Glu Glu Glu Asp Glu Ala
705   710   715   720

Ser Gly Gly Gly Tyr Arg Leu Gly Ala Arg Glu Arg Ala Leu Ser Pro
            725   730   735

Gly Leu Glu Glu Ser Gly Leu Gly Leu Leu Ala Arg Phe Ala Ala Ser
          740   745   750

Ala Leu Pro Ser Pro Thr Val Gly Pro Ser Leu Ser Val Val Gln Leu
      755   760   765

Glu Ala Lys Gln Lys Ala Arg Lys Lys Glu Glu Arg Gln Ser Leu Leu
      770   775   780

Gly Thr Glu Phe Glu Tyr Thr Asp Ser Glu Ser Glu Val Lys Val Arg
785   790   795   800

Lys Arg Ser Pro Ala Gly Leu Leu Arg Pro Lys Lys Gly Leu Gly Glu
          805   810   815

Pro Gly Pro Ser Leu Ala Ala Pro Thr Pro Gly Ala Arg Gly Pro Asp
          820   825   830

Pro Ser Ser Pro Asp Lys Ala Lys Leu Ala Val Glu Lys Gly Arg Lys

```
                    835                       840                          845

Ala Arg Lys Leu Arg Gly Pro Lys Glu Pro Gly Phe Glu Ala Gly Pro
    850                       855                       860

Glu Ala Ser Asp Asp Asp Leu Trp Thr Arg Arg Arg Ser Glu Arg Ile
865                       870                       875               880

Phe Leu His Asp Ala Ser Ala Ala Ala Pro Ala Pro Val Ser Thr Ala
                885                       890                       895

Pro Ala Thr Lys Thr Ser Arg Cys Ala Lys Gly Gly Pro Leu Ser Pro
                900                       905                       910

Arg Lys Asp Ala Gly Arg Ala Lys Asp Arg Lys Asp Pro Arg Lys Lys
            915                       920                       925

Lys Lys Gly Lys Glu Ala Gly Pro Gly Ala Gly Leu Pro Pro Pro Arg
    930                       935                       940

Ala Pro Ala Leu Pro Ser Glu Ala Arg Ala Pro Pro Pro Pro Pro Pro
945                       950                       955                   960

Pro Pro Pro His Pro Pro Leu Pro Pro Pro Pro Leu Pro Pro Pro Pro
                965                       970                       975

Leu Pro Leu Arg Leu Pro Pro Leu Pro Pro Pro Leu Pro Arg Pro
            980                       985                       990

His Pro Pro Pro Pro Pro Pro Leu  Pro Pro Leu Leu Pro  Pro Pro Gln
        995                       1000                  1005

Thr Arg  Thr Leu Pro Ala Ala  Arg Thr Met Arg Gln  Pro Pro Pro
    1010                      1015                  1020

Pro Arg  Leu Ala Leu Pro Arg  Arg Arg Arg Ser Pro  Pro Arg Pro
    1025                      1030                  1035

Pro Ser  Arg Pro Ala Arg Arg  Gly Pro Arg Pro Thr  Pro Gln Ala
    1040                      1045                  1050

Arg Arg  Arg Pro Arg Pro Ser  Pro Arg Arg Leu Leu  Arg Ser Pro
    1055                      1060                  1065
```

His Ser Leu Cys Ser Pro Arg Leu Arg Pro Gly Pro Arg Ala Asp
    1070   1075   1080

Pro Arg Arg Glu Arg Ala Ser Thr Ser Pro Pro Pro Arg Ser Trp
    1085   1090   1095

Pro Ser Gly Ser Ala Cys Arg Pro Trp Arg Thr Gly Pro Arg Ser
    1100   1105   1110

Pro Pro Ser Cys Gln Pro Gly Ser Ser Gly Ser Gly Ser Ala Ser
    1115   1120   1125

Pro Pro Ser Gly Val Ala
    1130

<210>   51
<211>   29
<212>   PRT
<213>   Homo sapien

<400>   51

Met Gly Arg Cys Val Ser Leu Thr Ser Val Ile Ile Phe Asp Ile Leu
1   5   10   15

Ser Val Tyr Tyr Glu Thr Leu Ala Ser Leu Gln Ile Phe
            20   25

<210>   52
<211>   161
<212>   PRT
<213>   Homo sapien

<400>   52

Val Ala Ile Pro Pro Leu Thr His Asn Leu Ser Ala Val Ala Pro Ser
1   5   10   15

Ile Asn Ser Gly Met Gly Thr Glu Thr Ile Pro Ile Gln Gly Tyr Arg
            20   25   30

Val Asp Glu Lys Thr Lys Lys Cys Ser Ile Pro Phe Val Lys Pro Asn
        35   40   45

Arg His Ser Pro Ser Gly Ile Tyr Asn Ile Asn Val Thr Thr Leu Val
    50   55   60

Ser Ser Glu Lys Asn Leu Leu Trp Ala Ser Lys Lys Arg Arg Glu Tyr

65   70   75   80

Ser Arg Thr Asp Val Arg Leu Pro Glu Leu Asn Tyr Asn His Leu Pro
                85   90   95

Glu Leu Arg Ala Leu Gly Gly Ile Ala Arg Asn Ser Arg Leu Thr Lys
          100   105   110

Lys Glu Ser Lys Ile Leu Ser Glu Ser Arg Ile Pro Ser Leu Ala Ala
          115   120   125

Ile Asp Leu His Thr Pro Ser Ile Thr Leu His Gln Val Ser Gly Pro
          130   135   140

Pro Leu Ser Asp Asp Ser Gly Ala Asp Leu Pro Gln Met Glu His Gln
145   150   155   160

His

<210>   53
<211>   33
<212>   PRT
<213>   Homo sapien

<400>   53

Met Asn Tyr Cys Leu Lys Thr Ser Ser Thr Ser Gln Ser Thr Thr Ala
1   5   10   15

Thr Ser Ile Cys Lys Asn His Tyr Leu Leu Tyr Val Leu Trp Tyr Leu
                20   25   30

Gly

<210>   54
<211>   89
<212>   PRT
<213>   Homo sapien

<400>   54

Met Val Ser Ile Lys Ser Leu Leu Phe Glu Ser Tyr Val His Gly Pro
1   5   10   15

Ala Val Val Arg Phe Ser Ala Leu Gln Leu Pro Asp Thr Phe Gly Arg
                20   25   30

Pro Met Ala Glu Arg Thr Arg Leu Ser Pro Gly Val Arg Ala Pro Ala
    35   40   45

Trp Ala Thr Tyr Val Gly Thr Pro Ser Arg Gly Phe Leu Leu Leu Tyr
    50   55   60

Glu Lys Lys Gln Ile Ser Val Ala Lys Thr Leu Leu Gln Thr Thr Arg
65   70   75   80

Glu Ala His Arg Asn Thr Val Ser Tyr
            85

<210> 55
<211> 110
<212> PRT
<213> Homo sapien

<400> 55

Met Val Gln His Arg Cys Met Leu Glu Arg Arg Val Val Met Asp Ala
1   5   10   15

Trp Ser Arg Pro Arg Tyr Ser Thr Ser Asn Phe Pro Arg Asn Gln Lys
        20   25   30

Asn Gly Glu Gln Val Leu Val Ser Gln Tyr Ser Ala Ser Val Tyr Thr
        35   40   45

Leu Gly Gln Gly Gln Ile Phe Pro Gly Glu Gly Phe Tyr His Cys His
        50   55   60

His Leu Glu Ile Leu His Arg Leu Glu His Arg Ala Ile Asp Phe His
65   70   75   80

Phe Cys Thr Gln Leu Cys Ser Glu Thr Gly Ala Ile Gly Val Leu Gly
            85   90   95

Glu Thr Gly Gln Met Glu Glu Val Glu Gly Ile Cys Thr Leu
           100   105   110